IN THE SPECIFICATION

Please replace paragraph [00010] with the following replacement paragraph.

[00010] Figure 1 is a schematic depiction of a nuclear reactor system 10 in accordance with one embodiment of the present invention. Nuclear reactor system 10 includes a cylindrical reactor pressure vessel 12 (RPV) which encloses a reactor core 14. RPV 12 includes a cylindrical wall 16 sealed at one end by a top head 18 and at the other end by a bottom head 20. RPV 12 is housed in a primary containment vessel 22 (PCV). The inside surface of the primary containment vessel 22 is lined with a steel liner. Primary containment vessel 22 includes a drywell 24 and a wetwell 26. In one embodiment, drywell 24 is a concrete cylinder with a domed top, and wetwell 26 is an annular chamber formed by a RPV pedestal or wall 28 and primary containment vessel 22. A suppression pool of water 30 is located in wetwell 26, and RPV 12 is located in drywell 24. Connection between drywell 24 and wetwell 26 is provided by the drywell/wetwell vent system embedded within wall 28. During a severe accident, additional connection is activated between the lower drywell and the suppression pool [[26]] 30 through a plurality of fusible valves 32 in the lower part of drywell wall 28. Downcomers or tubular channels (not shown) extend vertically within wall 28. One end of each downcomer is open to drywell 24 and the other end is coupled to horizontal nozzles 31 which are immersed in water of suppression pool 30. Drywell wall 28 extends vertically from a basemat 82 of PCV 22 and separates drywell 24 from suppression pool 30. In one embodiment, drywell wall 28 is annular. Valves 32 are fusible, and remain closed until the temperature in drywell 24 exceeds a predetermined temperature. At the predetermined temperature, valves 32 open to permit water to flow from suppression pool 30 into drywell 24. Additionally, a feedwater line 34 supplies water to RPV 12, and a steam line 36 carries steam away from RPV 12.